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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/667,029 | 09/18/2003 | Merwin H. Alferness | ROC920030085US1 | 9131 |

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IBM CORPORATION
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| EXAMINER | |
|---|---|
| NGUYEN, TANH Q | |

| ART UNIT | PAPER NUMBER |
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| 2182 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Advisory Action Before the Filing of an Appeal Brief | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/667,029 | ALFERNESS ET AL. | |
| | Examiner | Art Unit | |
| | Tanh Q. Nguyen | 2182 | |

*--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

THE REPLY FILED 17 October 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: _____.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because applicant's arguments are not persuasive.

1. With respect to the 112 first rejection of the limitation "determining an amount of memory bandwidth of a network processor **allocated** among a plurality of data types **used** to transmit data through a plurality of active ports", applicant cites page 10, lines 26-31 of the specification for support of the limitation, and argues that a prima facie case of non-enablement has not been established because it has not been shown that undue or unreasonable experimentation would be required to practice the claimed invention.

The argument is not persuasive because the cited section only supports "determining the total amount of memory bandwidth of the network processor currently used by the plurality of data types" on page 10, lines 26-31. There is **no allocation of memory bandwidth** in the cited section, and the cited section **does not support** the memory bandwidth or the plurality of data types used to transmit data through a plurality of active ports **being not current** - as required by the limitation.

Since the recited limitation cannot be supported by the specification, one of ordinary skill in the art would not be able rely on the specification to make and/or use the invention without undue experimentation.

Note that "an amount of memory bandwidth of a network processor **allocated** among a plurality of data types **used** to transmit data through a plurality of active ports" ***does not have the same meaning as*** a total amount of memory bandwidth of the network processor **currently used** by the plurality of data types. Note that "**allocated**"

does not have the same meaning as **"currently used"** (as a bandwidth may be allocated without being currently used).

If applicant intends for the limitation to mean "a total amount of memory bandwidth of the network processor **currently used** by the plurality of data types", applicant needs to amend the claims to include "a total amount of memory bandwidth of the network processor **currently used** by the plurality of data types".

2. With respect to the 112 first rejection of the limitation "dynamically adjusting the amount of memory bandwidth allocated to at least one of the plurality of data types based on the determinations", applicant cites the paragraph bridging pages 11 and 12 of the specification for support of the limitation, and argues that a prima facie case of non-enablement has not been established because it has not been shown that undue or unreasonable experimentation would be required to practice the claimed invention.

The argument is not persuasive because the cited section only supports "a value indicating enough memory bandwidth is currently available for activating a new Gigabit Ethernet output port (G-avail) is set to TRUE". It is not clear how the cited section supports "dynamically adjusting an amount of memory bandwidth of at least one data type **based solely on** determining an amount of memory bandwidth of a network processor **allocated** among a plurality of data types **used** to transmit data through a plurality of active ports **and** determining an amount of memory bandwidth of the network processor used by each of the plurality of data types".

Since the recited limitation cannot be supported by the specification, one of ordinary skill in the art would not be able rely on the specification to make and/or use

the invention without undue experimentation.

Furthermore, the claims appears to be incomplete because several essential steps in the paragraph bridging pages 11 and 12 are omitted (e.g. determining whether enough memory bandwidth is currently available to transmit Gigabit Ethernet data using a new Gigabit Ethernet port by comparing the value of (C-limit - A-rate - E-rate) to the minimum amount of memory bandwidth that must be allocated to each active new output port,...).

3. With respect to the 112 second rejection of the limitation "dynamically adjusting the amount of memory bandwidth allocated to at least one of the plurality of data types based on the determinations" in lines 9-11 of the response filed **June 6, 2007** - where the examiner indicates that it is not clear whether the amount of memory bandwidth in lines 9-11 refers to the amount of memory bandwidth in line 3 or the memory bandwidth of line 6, applicant argues that the rejection is not sufficiently clear because line 3 of claim 1 recites "comprising:", line 6 of claim 1 recites "transmit data through a plurality of active ports", and line 9 of claim 1 recites "and".

The argument is not persuasive because applicant appears to rely on the claim listing filed October 17, 2007 in making the argument, whereas the final office action relies on the claim listing filed June 6, 2007.

Note that applicant already submits in the response filed June 6, 2007 that the amount of memory bandwidth in lines 9-11 refers to the amount of memory bandwidth in line 6.

It is however not sufficient to submit that "the amount of memory bandwidth" on

line 9 refers to the amount of memory bandwidth in line 6. The claim needs to clearly indicate that there is only one interpretation for "the amount of memory bandwidth" on line 9. As applicant cites "the total amount of memory bandwidth currently used by the plurality of data types" on page 10, lines 26-31 to support the limitation on lines 3-5 (see paragraph 21 above), "an amount of memory bandwidth" in line 3 should be changed to "a total amount of memory bandwidth" to differentiate it from "the amount of memory bandwidth" in line 9. Note that lines 3, 6, 9 of claim 1 of the response filed June 6, 2007 and referred to above correspond respectively to lines 4, 7, 10 of claim 1 of the response filed October 17, 2007.

4. With respect to the 112 second rejection of the limitation "dynamically adjusting the amount of memory bandwidth allocated to at least one of the plurality of data types based on the determinations" being not clear, applicant submits that the limitation refers to adjusting...memory bandwidth allocated to one or more of each the plurality of data types, and that one or more of **each** of the plurality of data types has the same meaning as at least one of a plurality of data types.

The argument is not persuasive because "at least one of a plurality of data types" suggests the possibility of one entity (e.g. an ATM data type), whereas "one or more of each of the plurality of data types" always suggests more than one entity (e.g. an ATM data type and Ethernet data type).

If applicant intends for the limitation to mean "one or more of **each** of the plurality of data types", applicant needs to amend the claims to include "one or more of **each** of the plurality of data types".

5. With respect to the 102/103 rejections by Kawakami, applicant argues that applicant has not been able to find any mention of "determining memory bandwidth of a network processor".

The argument is not persuasive because Kawakami teaches a multiplex system [100, FIG. 1; 200, FIG. 2; 300, FIG. 3] processing ATM cells/packets - hence an ATM network processor (a processor of an ATM network) processing network cells/packets, and Kawakami teaches determining memory bandwidth of the multiplex system (see 102/103 rejections in the final office action) - hence determining memory bandwidth of a network processor. Note that it is not sufficient to argue that the invention is different from the reference, the claims need to have sufficient limitation to differentiate the invention from the reference - for patentability.

6. With respect to the 102 rejections by Alferness, applicant argues that applicant has not been able to find any mention of "memory bandwidth being allocated among a plurality of data types", and that "data of different transmission rates do not equate to a plurality of data types".

The arguments are not persuasive because the examiner considers a virtual channel with a bandwidth of 0.75 Mbps to transfer data of one type (i.e. data to be transferred at 0.75 Mbps), and a virtual channel with a bandwidth of 0.5 Mbps to transfer data of another type (i.e. data to be transferred at 0.5 Mbps), and because there is nothing in the claims that would preclude a data type being interpreted as data with a particular transmission rate. Note that it is not sufficient to argue that the invention is different from the reference, the claims need to have sufficient limitation to

differentiate the invention from the reference - for patentability.

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TECHNOLOGY CENTER 2100

October 22, 2007

TQN
October 22, 2007